1 ORDER OF OPERATIONS

Homework: Due the next class period. All work must be shown.

Simplify each expression.

1. $25 \div 5 + 4 \cdot 2^2 - 15 \div 3$
2. $18 \div 3 + 6 - 9 + 3 \cdot 9 \div 6$
3. $45 \cdot 3 \div 9 + 8^2 - 6^2 + 3$
4. $15 \cdot 8 \div 40 - 3 + 16 - 2^2 + 18$
5. $108 \div 12 \cdot 3^2 - 8 + 16 \div 2$
6. $96 \div 4 + 3^2 - (5 + 3) + 11$
7. $64 \div (8 \div 2) \cdot 3 - 6^2 + 4$
8. $12 \cdot 9 \div 3 - 8^2 + 7^2 - (14 + 8)$
9. $3 \cdot 8 \cdot 4 \cdot 2^2 \div (8 \div 4) + 17$
10. $(9 \cdot 2) + (3 \cdot 4) - (4^2 \div 2) + 37$

SIMPLIFY EXPONENTS

3.1 Assignment

11. $(a^2)(a^3)(a^4)$
12. $(a^2 \cdot a^9)^2$
13. $(a^2 b^6 c^4)^3$

14. $[(a^2)^3]^5$
15. $\dfrac{a^9}{a^4}$
16. $\dfrac{a^7 b^6}{ab^4}$

17. $\dfrac{a^{12}}{a^9}$
18. $(a^4 b^6 c^7)^8$
19. $(a^2)^4 (a^3)^2 (a)^4$

20. $\dfrac{(a^3 \cdot a^4 \cdot a^2)}{a^5}$
21. $\dfrac{a^9 b^7 c^8}{a^6 b^2 c^5}$
22. $\dfrac{(a^5 b^9 c^4)^3}{(a^3 b^2 c^3)^2}$

PRIME FACTORIZATION

23. 81
24. 74
25. 100

26. 69
27. 58
28. 44

29. 29
30. 68
31. 75

32. 32
33. 99
34. 84

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